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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/997,033

11/20/2001

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AIT 0130 PA (SBC 0113  
PA)

5754

7590

05/27/2004

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EXAMINER

YAO, KWANG BIN

ART UNIT

PAPER NUMBER

2667

7

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/997,033

Applicant(s)

J.STARR, THOMAS J.

Examiner

Kwang B. Yao

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 5 is/are pending in the application.
- 4a) Of the above claim(s) 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claim 1, drawn to a method of implementing a plurality of communication channels on a single twisted pair, classified in class 370, subclass 480.
  - II. Claim 5, drawn to a method of deriving additional communication channel, classified in class 370, subclass 241.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions I and II are differentiated as the followings: Invention I is directed to a communication method in frequency division channels; Invention II is directed to a method for deriving additional communication channels by monitoring the signal quality in frequency bands.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Robert Renke on 5/24/04 a provisional election was made without traverse to prosecute the invention of I, claim 1. Affirmation of this election must be made by applicant in replying to this Office action. Claim 5 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Specification***

5. The disclosure is objected to because of the following informalities: on page 5, Brief description of Fig. 2B is missing.

Appropriate correction is required.

***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,324,167. Although the

Art Unit: 2667

conflicting claims are not identical, they are not patentably distinct from each other because the application's claims merely broaden the scope of the patented claims by not claiming some elements. The following is the comparison between the patented claims and the claims in the instant application. U.S. Patent No. 6,324,167 claims the following limitations: 1. A method of implementing a plurality of communication channels on a single twisted pair telephone connection comprising the steps of: interfacing a first communication device with said telephone connection, said first communication device configured to communicate over said telephone connection on a first channel defined by a first frequency band; interfacing a second communication device with said telephone connection, said second communication device configured to communicate with said telephone connection on a second channel said step of interfacing comprising monitoring the signal power of a second frequency band above said first frequency band and, if the detected signal power is below a predetermined level, then assigning said second channel to said second frequency band, else monitoring the signal power of a third frequency band above said first and second frequency bands and, if the detected signal power is below a predetermined level, then assigning said second channel to said third frequency band; and interfacing a third communication device with said telephone connection, said third communication device configured to communicate with said telephone connection on a third channel, wherein said first, second, and third communication channels each reside in separate predetermined frequency bands. The instant application claims the following limitations: 1. A method of implementing a plurality of communication channels on a single twisted pair telephone connection comprising the steps of: interfacing a first communication device with said telephone connection, said first communication device configured to communicate over said

Art Unit: 2667

telephone connection on a first channel defined by a first frequency band; interfacing a second communication device with said telephone connection, said second communication device configured to communicate with said telephone connection on a second channel; and interfacing a third communication device with said telephone connection, said third communication device configured to communicate with said telephone connection on a third channel, wherein said first, second, and third communication channels each reside in separate predetermined frequency bands. The following elements are recited in the patent claims but not in the instant application: monitoring the signal power of a second frequency band above said first frequency band and, if the detected signal power is below a predetermined level, then assigning said second channel to said second frequency band, else monitoring the signal power of a third frequency band above said first and second frequency bands and, if the detected signal power is below a predetermined level, then assigning said second channel to said third frequency band. The application's claims are nearly identical in every other respect to the patent claims. Therefore, the application's claims are simply broader version of the patented claims. It is the examiner's position that broadening the patented claims by not claiming the above elements of the patented claims would have been obvious to one of the ordinary skill in the art in view of the patented claims. It is important to note that the instant application is a continuation of the application which yielded the patent (U.S. Patent No. 6,324,167) used herein as the basis for the obviousness type of double patenting rejection. The application is attempting to broaden the parent application's claims by eliminating some the claimed elements in the continuation at issue here.

***Claim Rejections - 35 USC § 102***

Art Unit: 2667

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Hamdi (US 6,345,071).

Hamdi discloses a communications system comprising the following features: as depicted in Figs. 1, 6, regarding claim 1, implementing a plurality of communication channels on a single twisted pair telephone connection (102) comprising the steps of: interfacing a first communication device (140) with said telephone connection, said first communication device (140) configured to communicate over said telephone connection (102) on a first channel defined by a first frequency band (602); interfacing (118) implementing a plurality of communication channels on a single twisted pair telephone connection comprising the steps of a second communication device with said telephone connection (102), said second communication device configured to communicate with said telephone connection on a second channel (606); and interfacing (122) a third communication device with said telephone connection (102), said third communication device configured to communicate with said telephone connection on a third channel (608) , wherein said first, second, and third communication channels each reside in separate predetermined frequency bands (602, 606, 608). See column 5, line 41 to column 11, line 36.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bowen et al. (US 6,580,710) discloses a method for facilitating broadband services.

Isaksson et al. (US 6,538,986) discloses a data transmission system.

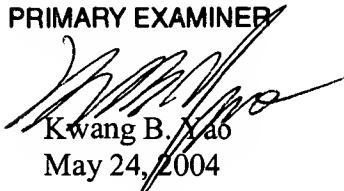
O'Toole et al. (US 6,373,860) discloses a DSL modem.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO  
PRIMARY EXAMINER



Kwang B. Yao  
May 24, 2004